



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,634	02/13/2004	Timothy Patrick Jon Perry	52493.000368	5377

21967 7590 12/31/2008

HUNTON & WILLIAMS LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
1900 K STREET, N.W.  
SUITE 1200  
WASHINGTON, DC 20006-1109

EXAMINER

PHONGSVIRAJATI, POONSIN

ART UNIT

PAPER NUMBER

3686

MAIL DATE

DELIVERY MODE

12/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/777,634

**Applicant(s)**

PERRY ET AL.

**Examiner**

SIND PHONGSVIRAJATI

**Art Unit**

3686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-12, 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 5,235,654).
3. As to **Claim 1**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising:
  - a. a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
  - b. a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606, col. 21 lines 25 to col. 22 line 13);
  - c. the rules engine determines whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33, col. 11 line 59 to col. 12 line 49, col. 32 line 66 to col. 33 line 22);

- d. the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33, col. 33 lines 50-66);
  - e. the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
  - f. the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).
4. As to **Claim 3**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).
5. As to **Claim 4**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors data converted by the rules engine (Anderson, col. 12 lines 54-65), wherein the state machine generates data tasks to enable data verification (Anderson, Fig. 4C), wherein the state machine receives responses to said data tasks (Anderson, Fig. 4C step 204), and wherein the state machine verifies data for forwarding to the operational database based upon said responses (Anderson, col. 32 lines 49-67).

6. As to **Claim 5**, Anderson teaches the system of claim 1, wherein application-related documents include electronic documents and paper documents (Anderson, col. 3 lines 34-41 and col. 4 lines 13-14).
7. As to **Claim 6**, Anderson teaches the system of claim 1, wherein the documents of a first type are stored in a first raw data database and documents of a second type are stored in a second raw data database (Anderson, Fig. 1R element 35).
8. As to **Claim 7**, Anderson teaches the system of claim 1, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 33 lines 8-22).
9. As to **Claim 8**, Anderson teaches the system of claim 1, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 32 lines 55-67).
10. As to **Claim 9**, Anderson teaches the system of claim 1, further comprising: the rules engine determines if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and the rules engine generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).
11. As to **Claim 10**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising: a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data

database); a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); the rules engine determines whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33); a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

12. As to **Claim 11**, Anderson teaches the system of claim 10, wherein the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

13. As to **Claim 12**, Anderson teaches a method for routing and processing insurance related data, comprising:

- a. receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56),

- b. storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
  - c. converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606);
  - d. determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33);
  - e. storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33);
  - f. generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
  - g. receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).
14. As to **Claim 14**, Anderson teaches the method of claim 12, further comprising: monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

15. As to **Claim 15**, Anderson teaches the method of claim 12, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 4C).

16. As to **Claim 16**, Anderson teaches the method of claim 12, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, col. 7 lines 14-20 and see section "Sequential repair of character recognition errors").

17. As to **Claim 17**, Anderson teaches the method of claim 12, further comprising: determining if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

18. As to **Claim 18**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more



instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

19. As to **Claim 19**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), one or more instructions for generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), one or more instructions for receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and one

or more instructions for determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

20. As to **Claim 20**, Anderson teaches the system of claim 19, further comprising: one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

### ***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654).

24. As to **Claims 2 and 13**, Anderson teaches a system for routing and processing insurance related data, as applied above in the rejection of claims 1 and 12 under 35 U.S.C. 102(b), but Anderson does not specifically disclose that the common format is extensible Markup Language. However, it is well known to those of ordinary skill in the art, that, the coded data in the application program storage database Anderson discloses (Anderson, Fig. 1R element 35) can be structured using any number of general-purpose database storage methodologies, including a XML markup language, and official notice to that effect is hereby taken.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include storing the data elements and attributes inside an XML document, as is well known to do, in order to organize the folders, tables, fields, and retrieved data elements of Anderson's invention (Anderson, col. 35 line 65 to col. 36 line 28), since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### ***Response to Arguments***

The Examiner withdraws previous 35 USC § 101 rejection, given applicant's corrections.

Applicant's arguments filed 09/09/2008 have been fully considered but they are not persuasive.

In response to Applicant arguments, Examiner has included additional citations to further demonstrate that Anderson indeed teaches the method of claim 1 comprising: a rules engine that converts the documents into at least one data element having a common format; the rules engine determines whether each of the at least one data element has been fully validated as clean data; the clean data is stored in an operational database for use in application processing. Anderson teaches that the aggregate of all the data segments for all of the fields created for the form are then stored as a master machine generated data structure (MGDS) (col. 4 lines 9-12) (reads on 'a rules engine that converts the documents into at least one data element having a common format'). The MGDS data structure storage document continues to a second and first level mapping table to determine if the data is clean or requires the artificial intelligence error correction process to correct a data string (as evidenced by Fig. 2C, 3, 5B, reads on 'the rules engine determines whether each of the at least one data element has been fully validated as clean data'). The database manager partition which objects are being stored to which field for each of the validated "clean" data. (col. 35 lines 20-60, reads on 'the clean data is stored in an operational database for use in application processing'). Examiner has addressed every limitation Applicant has rebutted and further concludes that Anderson anticipates the claimed invention.

***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
3. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **SIND PHONGSVIRAJATI** whose telephone number is (571) 270-5398. The examiner can normally be reached on Monday - Thursday 8:00am-5:00pm (ET).

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

/S. P./  
Examiner, Art Unit 3686  
17 October 2008

/Gerald J. O'Connor/  
Supervisory Patent Examiner  
Group Art Unit 3686